# Town of Milton

115 Federal Street Milton, DE 19968



www.milton.delaware.gov

Phone: 302-684-4110 Fax: 302-684-8999

## 2018 PWD BUDGET

# **PARKS**

**REVENUE** 

600-4965: Boat Dock Rental - \$2,500

Revenue to remain the same as in FY17. As of today, revenue is \$ 1,200.00. We currently have 1 boat slips remaining.

600-4940: Park Gazebo Usage Fee- \$1,000

Anticipated revenue for FY18 is \$1,000.00. Currently, \$745.00 in revenue has been received, this also includes security deposits that have not been refunded yet.

# **EXPENSES**

**600-5180**: Training - \$250

Requested funds will cover training for trimming trees, bushes, fertilizing, and plant maintenance and care.

600-5190: Temp Labor - \$0

No funds are requested for Temporary labor.

**600-5220**: Engineering Fees - \$0

No funds are requested for engineering fees.

**600-5280**: Supplies P & R - \$18,000

Funds will cover the cost of shovels, rakes, paint, and blades for equipment, portable toilet rentals, mulch, safety chips, and chemicals.

**600-5300**: Park Plantings - \$1,500

Planting trees, bushes, flowers etc.

600-5370: Day Labor Meals - \$2,400

To fund work release meals.

**600-5350**: Advertising - \$0

No funds are requested for advertising.

600-5390: Gasoline - \$2,800

This gasoline is used for all of the equipment used for all three parks.

**600-5420:** Misc. Operating Exp - \$0

No funds are requested for miscellaneous operating expenses.

**600-5470**: Repairs & Maint - Equip - \$4,000

FY18 budgeted amount to maintain lawnmowers, weed whackers, chain saws etc.

**600-5500**: Utilities - \$2,000

Currently, \$1,093.28 has been expended and June through September electric expenses are remaining.

**600- New line**: Benches - \$2,560.00

To add more seating in Milton Memorial Park. This will fund 2 additional steel benches.

600- New Line: Trash Receptacle



670 Mercer Road | Butler, PA 16001-1840

Toll-free: 1-800-284-8208 | Phone: 724-284-1213 | Fax: 724-284-1253

DATE	DATE   5/31/2017 ATTN//CREC MINOS			
		ATTN:	GREG WINGO	
QUOTATION #	035018-00		gwingo@ci.milton.de.us	
PROJECT NAME:	PARK	CUSTOMER#:		
QUOTE VALID TO:	6/20/2047			
		SELL TO:	TOWN OF MILTON	
PAYMENT TERMS:	NET 30		115 FEDERAL ST	
EST. LEAD TIME	11 WEEKS			
FAX NUMBER	(302) 684-8999		MILTON, DE 19968-1602	
SALES REP	Adam Benjamin	SHIP TO:		
EMAIL	AdamB@keystoneridgedesigns.com			
EXTENSION:	240		MILTON, DE 19968	

Please confirm the ship to location listed on the top portion of this quote and complete the following when placing your order

24 Hour Advance Shipment Notification To/ On-Site Contact: QUOTE SUMMARY:		Phone:	
QUOTE SUMMART:	Total Quotation Amount: Payment Required to Activate Order: Remaining Balance Due Net 30	\$6,521.00 \$0.00 \$6,521.00	

# SPECIAL CONSIDERATIONS:

Terms of Sale: Net 30

## LINE ITEMS:

Line	Part #	Description	LO <sub>4</sub> . T	11 11 15 15 1	
1	0AT03-2A11000-0001	AT3.22 ATLANTA 22 CALLONI ITEMS	Qty	Unit Price	<b>Extended Price</b>
		AT3-22 - ATLANTA 22 GALLON LITTER RECEPTACLE WITH ADJUSTABLE LEGS AND FLAT LID - GLOSS BLACK	4	\$680.00	\$2,720.00
	A0000-2030000-0001	22 GALLON DOME LID, ADD-ON - GLOSS BLACK		6405.00	
3	0AT02-6000000-0001	AT26 - ATLANTA RENCHIMETURACKOL OLOGO		\$125.00	\$500.00
	3333333	AT26 - ATLANTA BENCH WITH BACK 6' - GLOSS BLACK	2	\$1,280.00	\$2,560.00
			Total M	laterial Costs:	\$5,780.00
				Freight & Packaging:	\$741.00
I acknow	rledge that I have received and re	eviewed the complete terms and	Quo	tation Total:	\$6,521.00

I acknowledge that I have received and reviewed the complete terms and conditions of this quotation. By signing this page, I understand and accept all of Keystone Ridge Designs' Terms and Conditions as outlined on this page and all proceeding and subsequent pages of the quotation. See following page for complete terms and conditions.

Authorized Signature

:

<sup>\*</sup> Lift gate service is included.

#### STANDARD PAYMENT TERMS

STANDARD PAYMENT TERMS
Products and qualities needed are the responsibility of the customer. All products are produced to individual customer specification and unless otherwise stated, require a 50% down payment before manufacturing along with a sign off on this quotation. Balance of materials, freight and packaging and sales tax (if applicable) is due before products sin. This payment method is an effective and efficient system to ensure timely production scheduling, ultimately providing greater cost savings to the client. MasterCard®, Visa®, American Express® and Discover® are accented gavened to the client. American Express® and Discover® are accepted payment methods.

- A 50% down payment of total costs is required to activate an order with an approved credit card, check or money order. Check or money order payment orders will be activated upon receipt. Credit card orders will be immediately activated. Client may pay balance C.O.D. with a cashiers check. C.O.D. also requires an additional fee to the trucking company, payable with a second cashiers check. Please note that full truck shipments cannot be sent C.O.D.
- The remaining 50% of total costs is due before the products will ship from the factory.
   Upon notification from Client Services, the remaining balance is payable by approved credit card, check or money order.
- if payment in full is received along with order activation, a 2% discount will be applied to material costs only. Credit card purchases are excluded.
- On the day your products ship, Client Services will contact you with pertinent shipping

#### FREIGHT & PACKAGING

Freight and packaging charges to stated shipping address are based on quantities listed on quotation. If the scope of project changes, freight and packaging will be revised

Unless otherwise indicated, freight charges do not include unloading and placement. If you require lift gate service (lowering the products to ground level if there is no loading dock), please call for pricing before placing an order.

24-hour advance notification is including with your freight quote. You will receive a call from the shipping company prior to delivery

#### DISCOUNTS

Discounts are applied based on a tiered sales volume structure. If products or quantities change, discount will be revised accordingly.

Sales tax will be assessed only to products shipping to or picked up within Pennsylvania and will be listed as a line item on the quotation.

#### CANCELLATIONS & RETURNS

A 25% restocking fee will be assessed on returned orders and orders cancelled more than two weeks after placement.

#### STORAGE

Storage fees will begin to accrue after one month from the date that the client is notified that the products are ready to ship, or one month after the estimated delivery date (whichever is later)

#### LEAD TIME

Delivery dates are estimated dates only and vary, but are usually estimated for 8-12 weeks. Final ship date notification will be coordinated through our Client Services.

#### HARDWARE

Keystone Ridge Designs utilizes high-quality stainless steel assembly hardware where applicable Anchoring hardware, due to specialization required for each installation, is not supplied. Stainless steel hardware is recommended.

#### DELIVERY

The bill of lading is considered the client receipt and should be compared to each delivery for The bill of lading is considered the client receipt and should be compared to each delivery for discrepancy. Products should be carefully examined for damage incurred during shipment. Keystone Ridge Designs, Inc.® is not responsible for product damage or shortage once the bill of lading is signed by the client. Inconsistency between order and shipment quantities, as well as product damage, must be indicated on the bill of lading upon delivery and before the freight company leaves the delivery site in order to file a damage claim with Keystone Ridge Designs, Inc. If damage is found or if there are any concerns regarding delivery, immediately notify Client Services at 1-800-284-8208.

WARRANTY

Keystone Ridge Designs, Inc.® is committed to product quality as well as client satisfaction. 
Therefore, all products are covered against material and workmanship defects for THREE YEARS 
from the date of purchase. "Material" is defined by all metal substrates that create the structure of 
the site furniture and the powder coat finish that coats the product. "Workmanship" refers to the 
welding, material bending and finishing. Any defect to our product that is a failure of the product 
within the normal wear and tear of product usage is covered under the warranty. Product damaged 
by abnormal use, vandalism or acts of nature are not eligible for this factory warranty.

To apply for the three-year warranty, products must be installed according to the manufacturer's recommendations. Products are recommended to be bolted to the surface to avoid theft, damage or movement. Umbrellas must be anchored in an 80 lb. or heavier base to apply for the three-year warranty. For questions concerning proper installation of our products, please call Client Services. Keystone Ridge Designs, Inc. @ will repair or replace any part found defective upon written notification and inspection by Client Services.

Wood table/seat tops, fiberglass planters, gypsum planters and other products, as noted, are guaranteed for indoor use only.

#### PROPRIETARY STATEMENT

Restone Ridge Designs, Inc ® is proud to offer the design community exceptional site amenities.

Due to the time and resources invested in designing, manufacturing and marketing Keystone Ridge Designs™ products and services, we pursue design patents, copyrights, trademarks and service marks whenever possible. Any unlawful duplication or misrepresentation of Keystone Ridge Designs™ products or promotional materials will be rigorously protected.

Keystone Ridge Designs reserves the right to after pricing, product design, materials or construction

Keystone Ridge Designs' products are covered by one or more of the following patent numbers: United States Des. 372,133, 376,270, 380,313, 406,700; 408,701; 413,449; 413,738; 414,952; 418,852; 420,814; 421,515; 421,824; 423,166; 423,239; 424,769; 440,060; 446,399; 449,745; 454,674; 456,679; 457,452; 458,044; 459,563, 461,336; 465,679; 465,952; 466,318; 466,729; 467,104; 471,368; 474,618; 474,619; 481,890; 508,339; 510,218; 516,885; patents panding or Exclusive By Design M. 506,339; 510,216; 515,856, patents pending or Exclusive By Design™

Keystone Ridge Designs, Inc. designs, manufactures and markets an original and exclusive line of site furniture. In accordance with the United States patent process, our products are officially marked with the designated descriptive numbers and required labeling. We strictly prohibit any other labeling which interferes, mutilates or restricts the legal requirements of product identification.















\$2,126

Add to Quote Cart



## **FEATURES**

## **DOWNLOADS**

Product Flyer [/pdf/Log-Balance-Beam-38230]

Top View PDF [/uploads/media/38230.pdf]

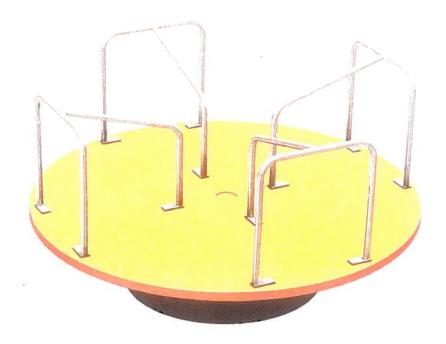
CAD File [/uploads/media/38230.zip]





\$2,064

Add to Quote Cart



# **FEATURES**

## **DOWNLOADS**

Product Flyer [/pdf/Miniature-Whirl-325]

Top View PDF [/uploads/media/325.pdf]

CAD File [/uploads/media/325.zip]













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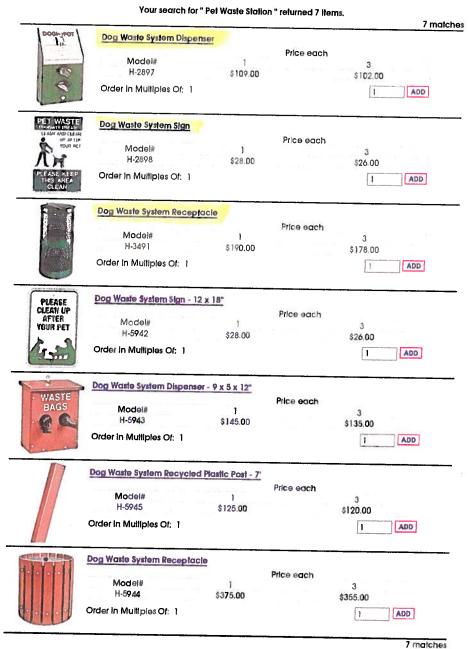
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## **SEARCH RESULTS**



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To add more trash receptacles in the parks. More people are visiting the parks daily and it would help to have more receptacles throughout the parks to keep ground trash to a minimal.

**600- New Line**: Log Balance Beam - \$2,126.00

It would be nice to add a Log Balance beam in Memorial Park. It will give the children more options in the park plus help them with balance and flexibility. The Town has not added to the playground equipment since it was remodeled in 2008.

**600- New Line**: Miniature Whirl - \$2,064.00

A spinning turn table would be a great add on to Memorial Parks playground equipment. We had a spinning turn table in the park before the remodeling but it was never replaced. What kid does not enjoy spinning around in circles.

600-New Line: Balance Beam Station - \$399.00

For years I have talked with several residents regarding some exercise equipment on Governors Walk. I have done a lot of research on this and found that you have to start somewhere. This is a balance beam that I would like to start with and every year we can keep adding to the equipment.

600-New Line: Pet Waste Stations - \$1,400

In FY17 I had asked for a budget of \$3,000.00 to purchase eight pet waste stations that got cut down to \$1,200.00. I have purchased four and I am asking to purchase the remaining four in FY18. Pet waste has become an issue all across the country with the spreading of fecal coliform bacteria which can cause cramps, diarrhea, intestinal illness and serious kidney disorders. It is hard to put a stop to all of it but we can help by providing the cans and bags in all of are parks.

600-New Line: Volcano Climber - \$5,590.00

If you look at a lot of other playgrounds you will see climbing walls or some sort of climbing equipment. Memorial Park does not have such playground equipment and I would like to see a climber for the children.

# **STREETS**

## **EXPENSES**

**250-5190**: Temp Labor - \$0

No funds are requested for Temporary labor.

**250-5220**: Engineering - \$2,000

FY18 budgeted amount to remain the same. Engineering services for future road construction, paving projects and bids.

**250-5240**: Legal Fees - \$2,500

FY18 budgeted amount to remain the same. Legal fees for reviewing documents for bid packages and other legal advice as needed.

**250-5280**: Supplies - \$8,500

FY18 budgeted amount to increase from \$5,500.00 to \$8,500.00. Supply expenses are for curb paint, brooms, shovels, signs, stone, top soil, crush stone, cold patching etc. We anticipate more roads turned over to the Town in FY18 and the expense for materials are going up in cost every day.

**250-5300**: Snow Removal - \$6,500

This expense line to remain the same as in FY17. Cannot predict the weather. We had a mild winter in 2017 which we still have salt left over so at this time I do not see any reason to increase this line at this time. The salt stock is good even knowing we anticipate more roads turned over to the Town in FY18. This budget line covers the cost of road salt, sidewalk salt, equipment for snow removal, etc.

**250-5350:** Advertising - \$500

Budgeted amount to stay the same as FY17. This will cover future road projects in the Town.

**250-5360:** Yard Waste Disposal - \$1,500

FY18 budgeted amount to increase from \$600 to \$1,500. Yard waste disposal is for disposing of tree limbs, shrubbery etc. Increase is due to Town growth area is larger. Currently, the town has paid \$772.60 for brush to be hauled out to Blessings Greenhouse.

**250-5370:** Safety Signage and Supplies - \$2,500

Budgeted amount will stay the same as in FY17. This line will be to fund safety flags and supplies for road work such as, flags, signs, barrels, and cones.

**250-5390:** Gasoline - \$2,100

Budgeted amount from FY18 has remained the same.

**250-5410**: Day Labor Meals - \$1,750

Budgeted amount for FY18 has remained the same. This line item covers the cost for work release workers.

**250-5420**: Misc Operating - \$0

No funds requested for miscellaneous expenses.

**250-5450**: Equip Rental - \$1,000

To fund equipment rental for sealing patching. The majority of streets that the Town own need crack sealing. Also, this expense will allow for the rental of a core drill to install sign posts in sidewalks. Budgeted amount for FY18 to be increased from \$400 to \$1,000.

**250-5470**: Repair and Main Equip: \$1,200

To fund repairs and maintenance of equipment such as bobcat, Kubota, and back hoe. Budgeted amount for FY18 will increase from \$1,000 to \$1,200.

**250-5801**: Cap Exp -Street Repairs - \$20,000

FY18 budgeted amount will stay the same. This line item will fund street patching, Town wide.

**250-5805**: Cap Exp - Street Signs - \$2,500

This expense line to remain the same as in FY17. This will fund upgrades for stop signs, speed limit signs, and other street signs.

250-5808: Cap Exp - Street Paving - \$?

This budget line for FY18 will cover the cost for paving Town owned streets. Streets that are in need of paving our as follows: Atlantic Ave, Chestnut St., New St., Shipbuilders Blvd, South Spinnaker Ln. and Orchard St.

Shipbuilders Blvd/ South Spinnaker Ln - \$148,497.25 Atlantic Ave - \$95,286.00 all or quote is broke down in three sections. Orchard St. - \$

**250-5809**: Cap Exp - Sidewalk Repairs - \$2,000

FY18 budgeted amount to remain the same. To repair Town owned sidewalks.

**250- New Line**: Cap Exp – Street Sweeper - Various

To purchase a new street sweeper. This will keep dirt and debris off of the streets, reduce the amount of weeds grown on the streets, and help drainage issues regarding storm drains. Currently, the streets are being sweep by hand.

Equipment Cost: \$190,570.00

Opt #1 – 5 annual payments with 1 advance payment of \$40,544.50. Opt #2 – 7 annual payments of with 1 advance payment of \$29,921.28.

Cost allocation: 20% Water, 10% Parks, 70% Streets

250- New Line: Cap Exp - Wood Chipper - \$14,890

To purchase a new wood chipper. This will allow public works to chip excess limbs on trees hanging in or on the streets and in parks to reduce hauling costs, and the ability to offer residents wood chippings for their convenience. It would cost less for the Town to purchase a chipper than it would to continue to pay to get rid of the brush. Currently we haul trees and limbs to Blessing's Greenhouse to dump the waste as it is the cheapest I have found to dump. Currently, the Town has spent \$772.60 in FY17 and we still have the heavy brush months still to come in June through September.

**250-New Line**: Cap Exp – Leaf Loader - \$3,800.99

This FY18 Cap Exp. would be a great addition to the Towns equipment. The public Works Staff could help residents with leaf collection in there yards by picking leaves up after they put in a pile at the curb line. This equipment would help prevent issues as leaves in the street and leaves running down the curb line finding their way to the storm drains and clogging them.

# Jerry Kovach President



# 17776 Oak Hill Drive - MHford, DE 19963 302-422-7676 Fax: 302-422-3434

Date of Proposal: 06/13/2017

Proposal

Project Number:

JP170438 and Street –

Orchard Street – Union Street to Mulberry Street

To:

Town of Milton 115 Federal Street Milton, DE 19968 Attn: Greg Wingo

Phone:

Cell: 302-462-1775

Email:

Project:

gwingo@ci.milton.de.us

We hereby submit the following specifications and price quotes for the above referenced project:

## Orchard Street - Union Street to Mulberry Street Paving

- 1. Traffic control.
- 2. Perform taper milling as necessary.
- 3. Patching as necessary.
- 4. Sweep and clean existing pavement of any loose material and debris.
- 5. Apply tack coat.
- 6. Place 2" Type "C" surface course overlay.
- 7. Clean up and haul away construction debris generated by our activities.

#### General Notes:

One Mobilization

No wage rates

- No retainage
- All mix quoted is 64-22/160 GY unless otherwise specified

#### **Escalation Clauses:**

- Quote based on current Liquid Asphalt Cost of \$406.67 per Ton
- All asphalt adjustments will be based on Virgin AC content only
- Invoicing will reflect any changes in liquid asphalt, fuel escalation and material increases from the time the proposal was quoted
- By signing below you indicate that you accept the above general notes and escalation clause.
   We hereby propose to furnish labor, materials and equipment in accordance with the above specifications and terms, for the sum of:
   Nineteen-Thousand, Six-Hundred Six and 00/100 Dollars.................(\$19,606.00)

Standard Terms: Additional Hot Mix used due to change in plans, scope, leveling and wedging will be billed separate from and in addition to the proposal price. All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Jerry's Inc. will not be responsible for damage to pavement due to construction activities and traffic. Owner to carry fire, tornado and other necessary insurance. This agreement is subject to strikes, accidents, unforescen construction problems, and other causes beyond our control. Jerry's Inc. workers are covered by Worker's Compensation Insurance.

#### **Special Terms:**

Payment Terms: Net 30 days from date of invoice. A 1.5% per month (18% per year) service charge will be added to all unpaid balances after 30 days from date of invoice. Purchaser agrees that payment is not contingent on future events, including regulatory approval, release of bond or draws. This proposal creates a contractual obligation requiring purchaser to pay all monies due, any service charge due and any collection costs Jerry's Inc. may incur including, but not limited to, reasonable counsel fees, court costs and other similar collection expenses. If at any time the financial responsibility of purchaser becomes impaired or unsatisfactory to the Company, Jerry's Inc. reserves the right to require payment in advance or satisfactory security.

ACCEPTANCE OF PROPOSAL: I hereby accept the above terms, specifications and conditions, and I authorize Jerry's Inc. to do the work as specified. Payment will be made as outlined above. I represent that I am authorized on behalf of the above-named owners to execute this proposal, to bind owners in contract to the contents of this proposal, and to undertake the work on this property.

Authorized by: Jerry Kovach

Mas Co Churca

nature:	Title:	8 0 110
inted ime:	Date:	
	Please return signed copy of proposal for scheduling. Keep a copy for your records.	





# 17776 Oak Hill Drive - Millord, DE 19963 302-422-7676 Far: 302-422-3434

Proposal

Date of Proposal: 06/09/2017

Project Number: JP170427

To:

Town of Milton

115 Federal Sta Milton DE, 19968

Attn: Greg Wingo

Phone:

P: (302) 684-4110 C: (302) 462-1775

Email:

Project:

gwingo(a'ci.milton.de.us

Shipbuilder's Village Project

We hereby submit the following specifications and price quotes for the above referenced project:

#### Roadway Improvements

- 1. Traffic control.
- 2. Roto-mill and remove existing pavement from designated patch areas.
- 3. Perform taper milling along curb to provide proper elevation and drainage of new payement.
- 4. Adjust existing utilities to proper elevation.
- 5. Sweep and clean pavement of all loose material and debris.
- 6. Apply tack coat.
- 7. Patch with Type "B" base course Hot Mix and compact to a thickness of 2" on approx. 2,300 SY.
- 8. Overlay with Type "C" surface course Hot Mix and compact to a thickness of 1 1/2" on approx. 11,750 SY.
- Clean up and haul away construction debris generated by our activities.

#### eneral Notes:

- One Mobilization
- No retainage
- All mix quoted is 64-22/160 GY unless otherwise specified
- Any curb repairs are excluded.
- No wage rates.

#### **Escalation Clauses:**

- Quote based on current Liquid Asphalt Cost of \$406.67 per Ton
- All asphalt adjustments will be based on Virgin AC content only
- Invoicing will reflect any changes in liquid asphalt, fuel escalation and material increases from the time the proposal was quoted

By signing below you indicate that you accept the above general notes and escalation clause.

We hereby propose to furnish labor, materials and equipment in accordance with the above specifications and terms, for the sum of: One-Hundred Forty-Eight Thousand, Four-Hundred Ninety-Seven and 25/100 Dollars...(\$148,497.25)

Standard Terms: Additional Hot Mix used due to change in plans, scope, leveling and wedging will be billed separate from and in addition to the proposal price. All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Jerry's Inc. will not be responsible for damage to pavement due to construction activities and traffic. Owner to carry fire, tornado and other necessary insurance. This agreement is subject to strikes, accidents, unforeseen construction problems, and other causes beyond our control. Jerry's Inc. workers are covered by Worker's Compensation Insurance.

#### Special Terms:

Payment Terms: Net 30 days from date of invoice. A 1.5% per month (18% per year) service charge will be added to all unpaid balances after 30 days from date of invoice. Purchaser agrees that payment is not contingent on future events, including regulatory approval, release of bond or draws. This proposal creates a contractual obligation requiring purchaser to pay all monies due, any service charge due and any collection costs Jerry's Inc. may incur including, but not limited to, reasonable counsel fees, court costs and other similar collection expenses. If at any time the financial responsibility of purchaser becomes impaired or unsatisfactory to the Company, Jerry's Inc. reserves the right to require payment in advance or satisfactory security.

ACCEPTANCE OF PROPOSAL: I hereby accept the above terms, specifications and conditions, and I authorize Jerry's Inc. to do the work as specified. Payment will be made as outlined above. I represent that I am authorized on behalf of the above-named owners to execute this proposal, to bind owners in contract to the contents of this proposal, and to dertake the work on this property.

Authorized by: Jerry Kovach

Mas Colours/

nature:	Title:	30.00
rinted ame:	Date:	

Please return signed copy of proposal for scheduling	e Keen a copy for your records





# 17776 Oak HIII Drive - Millerd, DE 19963 302-422-7676 Fax: 302-422-3434

Proposal

Date of Proposal: 06/09/2017

Project Number: JP170432

Milton – Atlantic Avenue

To:

Town of Milton 115 Federal St.

Milton DE, 19968 Attn: Greg Wingo

Phone: P: (

P: (302) 684-4110

C: (302) 462-1775

Email:

Project:

gwingo@ci.milton.de.us

We hereby submit the following specifications and price quotes for the above referenced project:

# Milton – Atlantic Avenue Paving

- 1. Traffic control.
- 2. Adjust manholes using manhole rings.
- 3. Perform taper milling as necessary.
- 4. Patching as necessary.
- 5. Sweep and clean existing pavement of any loose material and debris.
- 6. Apply tack coat.
- 7. 2" Type "C" surface course overlay.
- 8. Clean up and haul away construction debris generated by our activities.

DESCRIPTION	PATCHING (SY)	OVERLAY (SY)	PRICE
Union to Spruce: (including patching at Beringer intersection and patch on Beringer)	520	2,556	\$ 41,085.00
Spruce to Yew	-	2,336	\$ 29,224.00
Yew to County Road	-	2,446	\$ 30,326.00
ALTERNATE COMBINED PRICE IF ALL AREAS CAN BE PAVED AT THE SAME TIME	520	7,338	\$ 95,286.00





#### General Notes:

- One Mobilization per area
- No retainage
- All mix quoted is 64-22/160 GY unless otherwise specified
- No wage rates.

#### **Escalation Clauses:**

- Quote based on current Liquid Asphalt Cost of \$406.67 per Ton
- All asphalt adjustments will be based on Virgin AC content only
- Invoicing will reflect any changes in liquid asphalt, fuel escalation and material increases from the time the proposal was quoted
- By signing below you indicate that you accept the above general notes and escalation clause.
   We hereby propose to furnish labor, materials and equipment in accordance with the above specifications and terms, for the sum of:

#### Pricing as Indicated Above, per Table

Standard Terms: Additional Hot Mix used due to change in plans, scope, leveling and wedging will be billed separate from and in addition to the oposal price. All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Jerry's c. will not be responsible for damage to pavement due to construction activities and traffic. Owner to carry fire, tornado and other necessary insurance. his agreement is subject to strikes, accidents, unforeseen construction problems, and other causes beyond our control. Jerry's Inc. workers are covered y Worker's Compensation Insurance.

#### Special Terms:

Payment Terms: Net 30 days from date of invoice. A 1.5% per month (18% per year) service charge will be added to all unpaid balances after 30 days from date of invoice. Purchaser agrees that payment is not contingent on future events, including regulatory approval, release of bond or draws. This proposal creates a contractual obligation requiring purchaser to pay all monies due, any service charge due and any collection costs Jerry's Inc. may incur including, but not limited to, reasonable counsel fees, court costs and other similar collection expenses. If at any time the financial responsibility of purchaser becomes impaired or unsatisfactory to the Company, Jerry's Inc. reserves the right to require payment in advance or satisfactory security.

ACCEPTANCE OF PROPOSAL: I hereby accept the above terms, specifications and

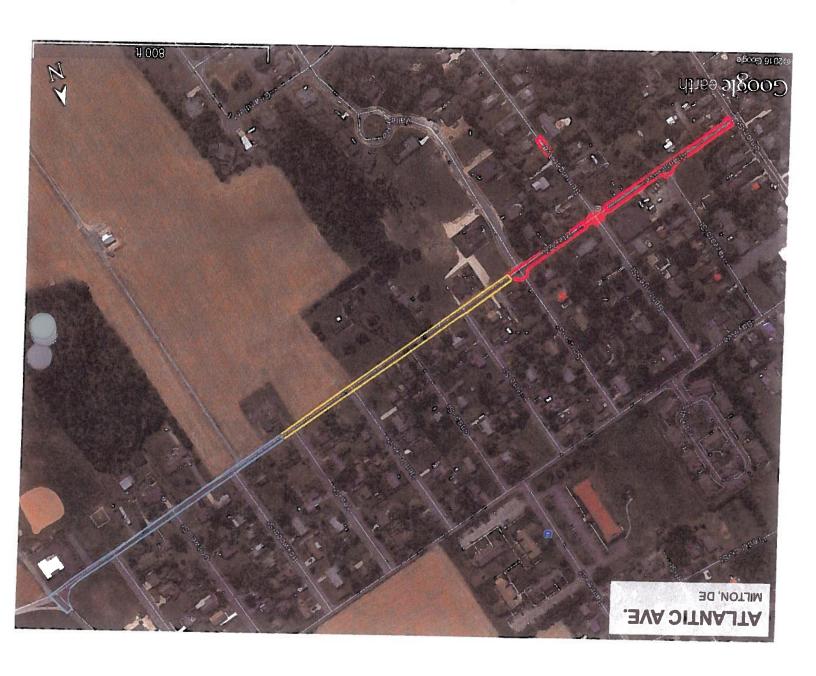
conditions, and I authorize Jerry's Inc. to do the work as specified. Payment will be made as outlined above. I represent that I am authorized on behalf of the above-named owners to execute this proposal, to bind owners in contract to the contents of this proposal, and to undertake the work on this property.

Authorized by: Jerry Kovach

undertake the work on this property.		Mas O Chinas
Signature:	Title:	3 5
Printed Name:	Date:	
Please	return vigned come of proposal for scheduling. Keep a come for a	nam nagarda











# **Presents a Proposal Summary**

of the



**Broom Badger** 

Broom Badger Street Sweeper with Dual Side Brooms

for

Town of Milton 115 Federal Street Milton, DE 19968 USA



Mike Moylan Tel:

#### PRODUCT DESCRIPTION

Conveyor squeegee, dual, hydraulically driven side brooms, variable height up to 10 ft, left side dumping hopper and sweeper is painted Elgin

#### **STANDARD FEATURES**

- · AM/FM Radio w/ CD
- · Aux-engine Kubota V2403M 59hp, Tier 4i
- · Low engine oil pressure, high coolant temp, hyd oil level/temp shutdown
- · Broom side, 36" and 42" steel vertical digger 4 and 5 segment
- · Broom side, hydraulic floating suspension, adjustable spring loaded deploy
- · Broom, main, 34" diameter, 58" wide prefab disposable
- · Camera, Rear and RH side view with in-cab monitor
- · Conveyor chain, hardened with polyurethane sprockets
- · Conveyor, 8 flight squeegee with rubber edging
- · Conveyor, lift independent from main broom
- · Conveyor, two piece replaceable wear plates
- · Conveyor raise in reverse
- · Conveyor stall alarm
- · Dirt shoes, heavy duty steel
- · Electric backup alarm
- · Front spray bar
- · Hopper inspection door
- · PM 10 Compliant (RULE 1186)
- · Sidebroom Tilt Right Hand
- · Siedbroom Tilt Left Hand

### DITIONAL FEATURES

016 Isuzu NRR Left Hand Steer (USA) Conveyor Flush Out System

· LED Stop/Tail/Turn



Quote Number: 2016-15971

#### LIMITED WARRANTY

GIN SWEEPER COMPANY warrants each new machine manufatured by it against defects in material and workmanship provided the machine is used in a normal and reasonable manner. This warranty is extended only to the original user-purchaser for a period of twelve 2) months from the date of delivery to the original user-purchaser.

ELGIN SWEEPER COMPANY will cause to be repaired or replaced, as the Company, may elect, any part or part of such machine which the Company's examination discloses to be defective in material or workmanship.

Repairs or replacements are to be made at the selling Elgin distributor's location or at other locations approved by ELGIN SWEEPER COMPANY.

The ELGIN SWEEPER COMPANY warranty shall not apply to:

- 1. Major components or trade accessories such as but not limited to, trucks, engines, tires or batteries that have a separate warranty by the original manufacturer.
- 2. Normal adjustments and maintenance services.
- 3. Normal wear parts such as but not limited to, broom filters, broom wire, shoe runners and rubber deflectors.
- Failures resulting from the machine being operated in a manner or for a purpose not recommended by ELGIN SWEEPER COMPANY.
- 5. Repairs, modifications or alterations without the consent of ELGIN SWEEPER COMPANY which, in the Company's sole judgment, have adversely affected the machine's stability or reliability.
- 6. Items subjected to misuse, negligence, accident or improper maintenance.

The use in the product of any part other than parts approved by ELGIN SWEEPER COMPANY may invalidate this warranty. ELGIN SWEEPER COMPANY reserves the right to determine, in its sole discretion, if the use of non-approved parts operates to invalidate the warranty.

Nothing contained in this warranty shall make ELGIN SWEEPER COMPANY liable for loss, injury, or damage of any kind to any person or entity resulting from any defect or failure in the machine.

TO THE EXTENT LIMITED BY LAW, THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

This warranty is also in lieu of all other obligations or liabilities on the part of ELGIN SWEEPER COMPANY, including but not limited to, liability for incidental and consequential damages on the part of the Company or the seller.

ELGIN SWEEPER COMPANY makes no representation that the machine has the capacity to perform any functions other than as contained in the Company's written literature, catalogs or specifications accompanying delivery of the machine.

No person or affiliated company representative is authorized to give any other warranties or to assume any other liability on behalf of ELGIN SWEEPEAR COMPANY in connection with the sale, servicing or repair of any machine manufactured by the Company.

ELGIN SWEEPER COMPANY reserves the right to make design changes or improvements in tis products without imposing any obligation upon itself to change or improve previously manufactured products.







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#### Street Sweeping/General Maintenance Sweeping

The most common municipal application is general maintenance sweeping, which happens on a regular schedule in most cities. Generally, this means sweepers that can handle picking common gutter debris, half of which is within about six inches from the gutter into the street. Most material is light, including sand, dirt. sticks, grass and small litter.

#### Suitable Sweepers

The full line of Elgin sweepers are appropriate for street sweeping and general maintenance, and can be equipped with a variety of options to customize to any specific applications.

#### **Our Products**

Air Sweepers

Mechanical Sweepers

Specialty Street Sweepers

Waterless Dust Control

Sweepers

Alternate Fuel Street

Sweepers

**Used Street Sweepers** 

#### **Applications**

Municipal

Street Sweeping

Leaf Removat

Catch Basin Cleaning

Year Round Sweeping

Spring Clean-Up: Heavy Duty

Contractor

Airport

Industrial

Race Track

#### FIND A DEALER

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International:

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Elgin Sweeper Company · Subsidiary of Federal Signal Company in a

1309 West Bertlett Road Elmn. IL 6010.0

Phone: (800) 323-4962

(847) 741-5370

Fax: (847) 742-3035

sates@elginsweeper.com

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#### PRODUCTS

Air Street Sweepers White facing WV Rejawind

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Mechanical Street

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### APPLICATIONS

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Perry Johnson Registrars, Inc., has assessed the Quality Management System of Elgin Sweeper Co, 1300 West Bartlett Road, Eigh, IL 68120 United States and hereby declares that Organization is in conformance with ISO 9001;2008.





SEARCH

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#### Catch Basin Cleaning

Some municipalities combine their street sweeping with their catch basin cleaning, which means they need the ability to lift leaves, silt, sand, gravel and litter out of the catch basin. Cleaning catch basins regularly prevents streets from flooding and keeps the rain run-off flowing as desired.

#### Suitable Sweepers

Air machines are perfect for combination sweeper and catch basin cleaning, if equipped with a boom style hose or catch basin cleaning hose feature. The boom style hose options allow for ease of operation and better maneuverability of the hose over a catch basin. The Elgin Whirlwind. Elgin Megawind and Elgin Crosswind are all excellent options for a combination sweeper catch basin cleaner. A hand held hose or litter hose is not suitable or durable enough for this application.

#### **Our Products**

Air Sweepers

Mechanical Sweepers

Specialty Street Sweepers

Waterless Dust Control

Sweepers.

Alternate Fuel Street

Sweepers

**Used Street Sweepers** 

#### **Applications**

Municipal

Street, Sweeping

Leaf Removal

Catch Basin Cleaning

Year Round Sweeping

Spring Clean-Up, Heavy Duty

Contractor

Airport

Industrial

Race Track

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Elgin, IL 60120 Phone: (800) 323-4962

(847) 741-5370 Fax: (847) 742-3035

sales@elginsweeper.com

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#### **PRODUCTS**

All Street Sweepers Whateend acv Pegasili 1

Crosseand Crosswind Fall Crosswood GHS GaY

Mechanical Street Sweeners

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SEARCH

#### Home **Products** About Us Applications Service/Parts Contact Us Environmental Info

#### **Our Products**

- Air Sweepers
- Mechanical Sweepers
- Specialty Street Sweepers
- Waterless Dust Control
- Sweepers
- Alternate Fuel Street
- Sweepers
- Used Street Sweepers

#### **Applications**

#### Municipat

- Street Sweeping
- Leaf Removal
- Catch Basin Cleaning
- Year Round Sweeping
- Spring Clean-Up. Henvy Duty

#### Contractor

- Airport
- Industrial
- Race Track





Cold or northern climate municipalities experience freezing temperatures and need to sweep material year round, such as sand, gravel, silt, traction sand, salt residue and cinder. This type of sweeping cannot be done with water for dust suppression, given the possibility of freezing both to the street and the sweeper components.

#### Sultable Sweepers

Mechanical sweepers are often the best choice for this application. However, in areas where dust is a problem or concern that dried sand and salt may result in dust when sweeping, waterless/dry dust control sweepers are an excellent option. The Elgin Waterless Eagle and the Eigin Waterless Pelican are both suitable for year round, cold weather sweeping as they control dust with a vacuum system and specially designed skirling around the brooms. If air is the preferred technology; the solution is the Crosswind NX is equipped with a high efficiency air filtration system that can be effectively used with significantly reduced water. (It is important to note that running an air sweeper without the use of water can adversely affect the components causing premature wear as material may be drawn through the system and into the fan.)



\*\* Select \*

International:

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4 Subsidiary of Federal Styrics Corp. Latice

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sales@eiginsweeper.com

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Login

#### **PRODUCTS**

Air Struct Sweepers Whiteheard wV Megarend Crosswind George Flag Creasing 645

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Used Street Sweepers

Leaf Perferral Colch Basin Cleaning Veur trained Sweeps Spring Clean Up. Hearth

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Contractor

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SEARCH...

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Spring Clean Up and Heavy Duty Sweeping

Sand, gravel, silt, salt and traction sand often accumulate in northern climates after a winter of reduced sweeping, and require rugged sweepers that are strong enough for the task. This material is often very heavy and compacted and requires a powerful broom and conveyance action to dig out and remove it from the surface.

#### Suitable Sweepers

Mechanical sweepers are typically the best option, as they are best suited for conveying large quantities of heavy material. making the Elgin Pelican, Elgin Eagle, Elgin Broom Bear and Elgin Road Wizard excellent options. Air sweepers can be overwhelmed with the amount of clean up and the heavy nature of this material.

#### **Our Products**

Air Sweepers

Mechanical Sweepers

Specialty Street Sweepers

Waterless Dust Control

Sweepers

Afternate Fuel Street

Sweepers

Used Street Sweepers

#### Applications

#### Municipal

Street Sweeping

Leaf Removal

Catch Basin Cleaning

Year Round Sweeping

Spring Clean-Up. Heavy Duty

Contractor

Airport

Industrial

Race Track



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#### PRODUCTS

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Mechanical Street

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Broom Badger®



# THE BROOM BADGER

FROM ELGIN SWEEPER COMPANY

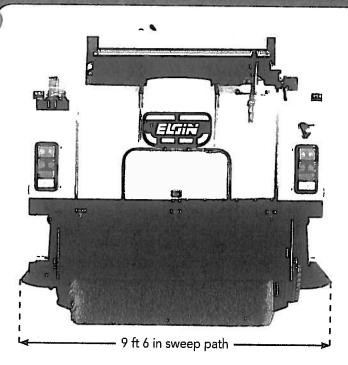




Looking for a maneuverable, powerful, compact mechanical sweeper? Consider the Broom Badger from Elgin weeper. This compact dual-engine sweeper is easy to operate and maintain, and does not require a CDL to perate, making it ideal for municipalies and contractors who need reliable, powerful cleaning without a full-ze sweeper. The low-profile design uses best-in-class components, has reduced operating weight, and consumes less fuel than older equipment. The short wheelbase and tight turning radius give the operator great maneuverability for cul-de-sac curb lines and winding streets without sacrificing robust sweeping performance.



# EASY TO OPERATE. EASY TO MAINTAIN. NO CDL REQUIRED.



#### **ROBUST SIDE BROOMS**

The Broom Badger features large dual side brooms with a maximum 9' 6" sweep path. The direct drive brooms are controlled in-cab for down pressure and tilt angle. The trailing arm design with spring kickback protects them from damage when sweeping close to obstacles. Four solid steel arms on each broom feature chromed shafts with composite greaseless bushings on all pivot points. These bushings reduce daily maintenance and have a long lifespan that results in lower overall operating costs.

#### **EFFICIENT MAIN BROOM**

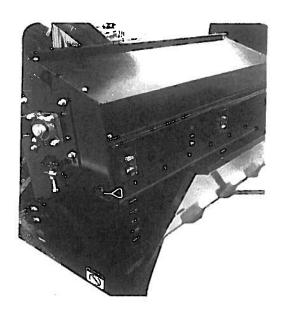
The 58" polypropylene main broom is hydraulically driven. The elevator is slightly wider for closer broom placement, providing more efficient material lifting and maximizing broom effectiveness. Self-aligning bearings for the broom mount and the free floating design ensure smooth movement over road surfaces. Simple adjustments for down pressure can be made to prevent broom coning.

## **HEAVY DUTY SQUEEGEE ELEVATOR**

The Broom Badger's 58.5" wide direct drive squeegee elevator handles heavy-duty sweeping applications. The innovative design eliminates the need for curtains and provides increased productivity. The open design and hinged plate enables easy cleaning and inspection. An in-cab alarm notifies the operator if an elevator stall occurs, then the rotation can then be reversed from inside the cab to dislodge the jammed debris.

#### HYDRAULIC SYSTEM

The heart of the Broom Badger's hydraulic system is a variable displacement load-sensing piston pump that produces up to 32 GPM at 3,000 PSI. This style pump has lower fuel consumption and lower heat build-up across the entire hydraulic system. State-of-the-art hydraulic valves are used for each function and feature manual over-ride and flow adjustments for greater simplicity and reliability. In-cab electrical controls, external filter and restriction indicators, and low oil level shutdown are standard. All hydraulic valves are located in one ground level area for easy maintenance.



# **OPTIONS**

**ELEVATOR FLUSHER** 

The elevator flusher allows hydrant water flow to flood the squeegee elevator housing, reducing clean up time and effort.

AIR SUSPENSION SYSTEM

The air suspension system, an Elgin exclusive on this size chassis, allows for a smooth ride, extended suspension capacity and rock-solid hopper dumping stability.

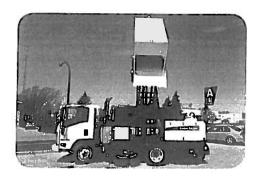
PM-10 COMPLIANT WATER SYSTEM The PM-10 compliant water system assures compliance with California air quality rules.

# SUPERIOR MECHANICAL SWEEPER DESIGN



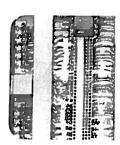
#### LARGE DEBRIS HOPPER

The side-dumping, 4 cubic yard debris hopper allows extended sweeping intervals for increased productivity on the job. The hopper is lifted by a single 4 stage cylinder lift with 9,400 lb lift capacity. A full payload can be offloaded from the side dump hopper at ground level or at dump heights up to 10 feet.



#### **EFFICIENT DUST SUPPRESSION SYSTEM**

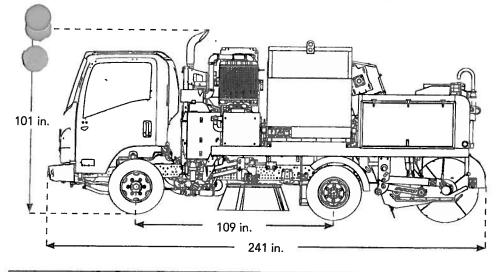
The sweeper is equipped with a 220 gallon polyethylene water tank for dust suppression. Water nozzles are carefully positioned to suppress dust while sweeping.

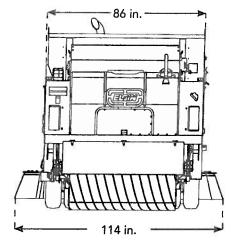




#### **ELECTRICAL SYSTEM**

The Broom Badger's simple electrical system has been carefully designed to be extremely easy to navigate. It is hard wired with no controllers and electrical controls are sealed in a weather-proof systems locker. Wires are color and number coded for easy maintenance and trouble shooting.





# **SPECIFICATIONS**

#### SWEEP PATH

- Main Broom Only: 58" (1473 mm)
- Main Broom & One Side Broom: 87" (2210 mm)
- Main Broom & Two Side Brooms: 114" (2896 rnm)

#### MAIN BROOM

- Diameter 36" (914 rnm)
- Length 58" (1473 mm)

#### SIDE BROOM

- Streetside Diameter: 36" (914 mm)
- Curbside Diameter: 42" (1067 mm)

#### CONVEYOR

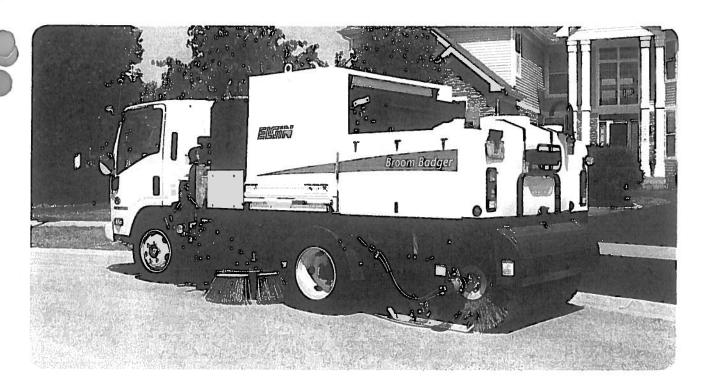
Squeegee with rubber edging

#### HOPPER

• Volumetric Capacity: 4 cu. yds (3.02 m<sup>3</sup>)

#### WATER SPRAY SYSTEM

• Tank Capacity: 220 gal (833 L)



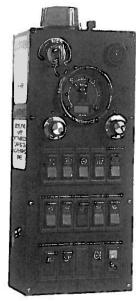
#### HIGH PRODUCTIVITY SWEEP SYSTEM

- Efficient Kubota 59 HP T4i auxiliary engine
- Variable displacement piston type hydraulic pump producing 32 GPM
- Easy access to all components
- Only 6 grease points on sweeper body
- All pivot points feature chromed shafts with greaseless, long life bushings

### **COMFORTABLE CHASSIS AND CAB**

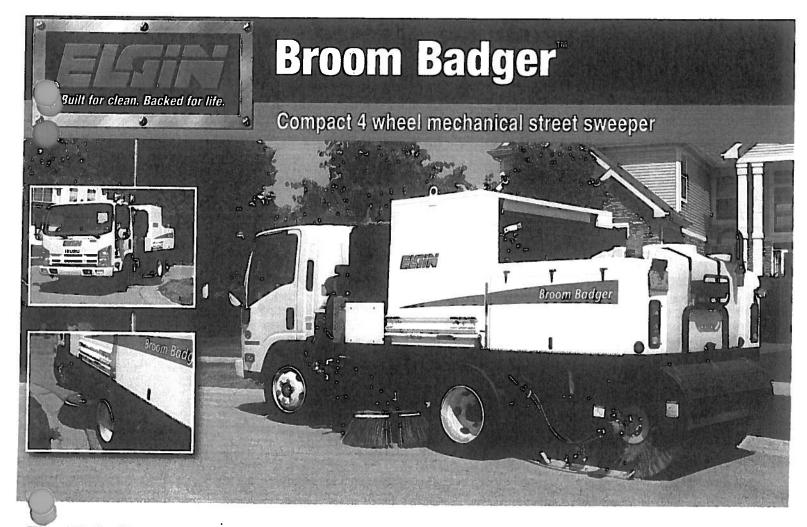
The Broom Badger is mounted on a 19,500 lb. GVWR Isuzu NRR Class 5 cabover chassis with optional air ride suspension for operator comfort and highway travel speed for quick transport from job to job. The cabover design provides excellent visibility for safer operation and has a short 109" wheelbase and tight 16'9" turning radius for exceptional maneuverability. Spot mirrors and low-cut windows enable precise gutter broom viewing. A standard dual-camera and 7" color monitor system provide views of the side broom or rear view for increased safety when sweeping.

An ergonomic control console ensures easy, comfortable operation. Simple rocker switches allow "one button" operation for quick sweep/transport mode changes.









# P Elgin Broom Badger™ — Easy to operate. Easy to maintain. No CDL required.

Looking for a maneuverable yet powerful compact mechanical sweeper? If so, consider the Broom Badger<sup>™</sup> from Elgin Sweeper. This dual-engine sweeper, is easy to operate and maintain and does not require a CDL to operate making it ideal for municipal and contractor customers who need powerful cleaning without a full-size sweeper. The compact, low-profile design allows easy access to tree-lined streets. The short, 109-inch wheelbase and a tight turning radius give the operator great maneuverability for cul-de-sac curb lines and narrow streets without sacrificing robust sweeping performance.

**Chassis/Cab** The Broom Badger is mounted on an Isuzu NRR 19,500 lb class 5 cabover chassis that provides highway travel speed for quick transport from job to job and excellent visibility for safer operation. An available air ride suspension option provides additional operator comfort. The standard 12-inch spot mirrors and low-cut windows provide the operator with precise gutter broom viewing. A standard dual-camera and color monitor system provides views to the side broom or rear view. The ergonomically designed control console provides easy, comfortable operation.

**Sweep System** The efficient sweeping system is powered by an auxiliary Tier 4i Kubota 59-horsepower diesel engine and the variable displacement hydraulic pump provides just the necessary amount of oil.

**Broom design** The sweeper features dual gutter brooms with a 114-inch sweep path (max). The direct drive brooms feature in-cab control for down pressure and tilt angle. Four-link broom trailing arms provide increased longevity.

**Elevator design** Featuring a 58.5-inch direct drive squeegee-type conveyor to handle heavy-duty sweeping applications and eliminate the need for curtains and provides increased productivity. The hinged cover allows for easy cleaning and inspection.

Water tank and hopper The sweeper is equipped with a 220-gallon water tank for dust suppression. The side-dumping, 4-cubic and debris hopper enables extended sweeping intervals for increased productivity on the job. A full payload can be off-loaded from a side dump hopper from ground level to a 10 ft. dump height.

For more information or to request a demonstration of the Elgin Broom Badger contact your Elgin dealer or visit www.elginsweeper.com to locate a dealer nearest you.

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# Reducing Storm-Water Pollution Through Effective Street Sweeping:

# Street Sweeper Pickup Performance Test Results for Elgin Sweeper



By Brian Giles Sweeper Products Manager Elgin Sweeper

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#### **EXECUTIVE SUMMARY**

Elgin Sweeper, a leading manufacturer of street sweepers, recently made a significant investment in conducting an independent, credible, repeatable test to measure the sweeping efficiency of its sweepers. The company sought out Pacific Water Resources, Inc. (PWR), one of the most recognized independent experts on storm-water control in the United States, to conduct the tests.

Five controlled pickup performance tests on four different Elgin Sweeper street sweepers (a prototype Crosswind NX high-performance filter regeneration sweeper with dust control, a standard Crosswind® sweeper, a vacuum Whirlwind® MV sweeper and a mechanical Waterless Eagle® FW sweeper) were conducted over a three-day period at a curbed test track under a tent that was erected on a parking lot.

The overall pickup efficiencies for the six tests ranged from 97.5 percent to 81.0 percent, with the prototype Crosswind NX high-performance filter regeneration sweeper with dust control performing the best. The next best performer was the standard Crosswind sweeper, followed by the Whirlwind MV sweeper and then the Waterless Eagle FW sweeper. The Waterless Eagle sweeper was also tested with water spray for fugitive dust control and had the lowest overall pick-up of the sweepers tested.

#### INTRODUCTION

In 1977, Congress passed the Clean Water Act to preserve the environmental health of the waterways of the United Sates. Originally, the law called for the Environmental Protection Agency (EPA) to regulate water pollution at the source. Later amendments to the law regulated pollution from storm-water runoff so that nothing but rainwater enters the rivers, lakes and estuaries.

The EPA has issued two sets of storm water regulations since 1977. Phase I set standards for municipal storm water systems (MS4s) serving populations of more than 100,000, construction sites larger than five acres, and 10 major industries. Phase II runoff rules, issued in 2000, simplified compliance and extended coverage to MS4s in small towns and suburbs and building sites that disturb between one and five acres of land. Phase II rules also give municipalities the flexibility to select a variety of best management practices (BMPs) to control storm-water runoff pollution.



In today's economy, everybody is challenged with doing more with fewer resources. Many municipalities in the United States are using structural treatment devices such as underground vaults and drain catch basin inserts as part of their BMPs. These options are expensive to install and maintain. However municipalities are spending their money, it is essential that they receive a measurable return.

The sweeping industry has long been looking for a way to quantify repeatable effectiveness of sweepers on picking up street debris. During the last 20 years, several tests have been conducted to try to determine if street sweepers reduce storm-water pollution. A number of sweeper manufacturers have been making claims about what their machines can do to reduce storm-water pollution, without any supporting data.

Elgin Sweeper recently made a significant investment in conducting an independent, credible, repeatable test to measure the sweeping efficiency of its sweepers. The company wanted quantifiable results of what storm-water experts say about the performance of its street sweepers. The company sought out Pacific Water Resources, Inc. (PWR), one of the most recognized independent experts on storm-water control in the United States.

PWR has developed a state-of-the art load estimation procedure called SIMPTM (simplified particulate transport model) that can quantify urban pollution loadings and accurately estimate optimum cleaning practices for streets and catch basins. Developed and refined over a period of approximately 20 years, SIMPTM has been used on numerous occasions to predict pollutant loading and wash-off processes and is considered by many industry experts to be the most credible storm-water quality modeling package in the United States.

Roger Sutherland, the president of PWR and a leading storm-water control expert in his own right, was directly involved in the test conducted on the Elgin Sweeper units. Sutherland is a senior water resources engineer with 30 years of professional engineering experience in drainage master planning, water quality management planning, riverine hydraulics, flood management and water-quality facility design.

From the standpoint of dollars per pound of pollutant removed from the storm water, these test results confirm what Elgin Sweeper already knew – that nothing comes close to matching the effectiveness of Elgin Sweeper street sweepers in removing storm-water pollutants.

Now Elgin Sweeper can provide its municipal customers – and the overall industry – with solid, factual data on the efficiency of its sweepers in picking up street debris and removing storm-water pollutants.

This paper describes the details of the testing performed and documents many details regarding the importance of street sweeping as part of a municipality's efforts to comply with the EPA's Storm Water Phase II regulations.

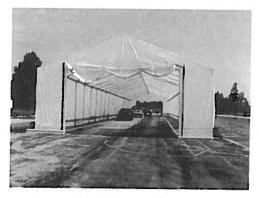
#### **METHODOLOGY**

#### **Test Site Selection**

Since the testing was expected to occur over a number of days, it was important that PWR design a test that could be repeated under dry weather and low wind conditions at the same location on any given day. Dry weather conditions were needed since the test involved the use of a street dirt simulant – remaining amounts of which had to be removed after the sweeping operation, using an industrial vacuum cleaner (i.e., shop vac) powered by an electric generator. It was also important to select a site that essentially had no traffic or could at least be closed to traffic. And most importantly, the test site needed to be a curbed street with at least fair pavement conditions similar to the conditions generally encountered by street sweepers on their routes.

Given these requirements, it was decided to conduct the tests at a parking lot under a large tent. The following photographs show the tent and the 50-foot long curbed test track that was used.







#### **Testing Protocol**

The test procedure was quite simple. A known quantity of the street dirt simulant was spread evenly along the test track curb line using a fertilizer spreader whose spreading width is approximately two feet.

A street sweeper then performed a single pass at a specified forward speed. However, the actual time that the machine spent cleaning the test length was recorded using a stopwatch so the average sweeping speed could be computed. Several digital photographs were taken before and during the sweeping operation. Before the test material was actually applied, the street sweeper operator was

given the opportunity to practice several timed sweeping passes. This was to ensure that the operator would successfully execute the desired sweeping speed when the actual test was performed. For example, a street sweeper traveling at exactly five miles per hour would be on the test track for only 6.8 seconds. These practice runs also ensured the track was very clean before the simulant was applied.

Following the sweeping, an industrial vacuum cleaner with a smooth stainless steel canister was used to vacuum up by hand all of the simulant that remained on the test track, including any simulant moved further away from the original application area by the gutter broom action. After the hand cleaning, the vacuum hose was elevated and shaken several times to ensure that all of the pebbles had traveled to the canister. The vacuum was then turned off and the canister carefully opened in a working area protected from any wind. The Dacron filter cloth covering the canister to separate the machine's built-in air filter from the captured material was tapped several times by a brand-new, clean paintbrush before it was very carefully removed and brushed to dislodge material trapped on the canister side of the filter cloth. The cloth was then carefully transferred to the canister. A new Dacron filter was used after each test, and a new paper filter was used for each day of testing.

The captured material was then slowly transferred from the vacuum canister to a plastic zip-lock bag using the paintbrush and a wire holder needed to keep the bag open. This delicate operation required two people to ensure that none of the captured material was spilled. Some loss of dust was expected despite these precautions, but its mass weight would be generally very small and not significant enough to meaningfully influence the results. Each zip-lock bag was sealed and labeled. The material was weighed in the field using a kitchen scale (after zeroing out the weight of an empty zip-lock bag), and that weight was recorded along with other test information on a sampling log. The material was then taken to a soils lab where it was weighed, dried, weighed again and sieved into eight pre-selected particle size groups. A single representative sample of the simulant was also sieved so the particle size distribution of the initial material was recorded.

As noted earlier, before the application of the test material for the first test, the test track and its approach section was swept several times by the sweeper waiting to be tested, and then hand vacuumed. However, this sample was not retained but discarded instead. Between tests, the test track



and approach section were swept several times, but not hand cleaned again. If water was used in these pre-test sweepings, ample time would have been needed for the track to completely dry before the next test material could be applied. On cloudy or cool days, there was no water spray between testing. On those occasions when water was used during a test, ample time was needed for the track to completely dry before the sample collection using the vacuum started.



Spreading the dust simulant on the test track



Street sweeper performing single pass on test track



Hand vacuuming remaining simulant on track after sweeping



Transferring captured material from hand vacuum to zip-lock bag

#### Safety

When conducting a street cleaning performance test, safety is perhaps the most important consideration. It took a considerable amount of time to initially clean the test track, place the material on the track, sweep the track and hand vacuum the remaining material for each machine and initial mass tested. Working at a location open to traffic would have been dangerous and highly undesirable. This is why the test track used in this test was closed to traffic.

#### Length of track

The length of the test track was also very important. The longer the length of the test track, the longer it would take to prepare the test and hand vacuum the remaining amount. If the test track was too short, the mass of the remaining material may have been too little to effectively measure its particle size distribution. The 50-foot test track length used in this test provided the length needed to balance these competing considerations.

#### Forward speed

The forward speed of a street sweeper will also affect its ability to pick up particulate material. The pickup effectiveness increases as the forward speed decreases. The machine operators were instructed to clean at approximately 5 miles per hour, which is generally considered the optimum operating speed, given the tradeoff between pickup performance effectiveness and the need to sweep a certain number of miles a day. Operating at 5 miles per hour, it took only about 7 seconds to sweep the 50-foot long test track. Since the testing protocol called for measuring the actual time it took the cleaner to sweep the test track, it was clear exactly how fast each machine was going during each test.



#### Street dirt simulant

One of the most important aspects of the street cleaner pickup performance test was the amount and particle size distribution of the street dirt that was used. The magnitude and particle size distribution of accumulated street dirt was first investigated in the United States in 1969 when the historic APWA Chicago study of urban runoff pollution sources was conducted. PWR is unaware of any other significant street dirt accumulation or particle size data set for the Chicago metropolitan area.

The test for each Elgin Sweeper machine used 7.5 pounds (3405 grams) of simulant applied along the 50-foot test track, which was equivalent to 792 pounds per curb mile (225 grams per curb meter).

The materials needed to create the simulant mixture had to be available in relatively small quantities; have a known particle size distribution so the proper recipe could be designed; and have the same specific gravity of real street dirt. The actual total particle size distribution of the simulant was chosen on the basis of years of research of street dirt in testing at numerous cities in the US.

PWR had previously developed a spreadsheet tool that allowed them to enter the manufacturer's specified particle size distribution (PSD) of up to ten different simultant ingredients. The output from the tool was the optimal quantity of material for each ingredient needed to most closely match a targeted PSD. The targeted PSD was the overall average measured in the Bellevue National Urban Runoff Project (NURP) during dry season conditions. Previous analyses had concluded that this PSD – which was the average of hundreds of street dirt samples collected on four different catchments over the course of several dry seasons – closely matched the overall average PSD observed in the extensive monitoring of street dirt conducted by PWR staff over a period of nearly 20 years.

#### **RESULTS**

#### Sweeper models tested

Five controlled pickup performance tests on four different Elgin Sweeper street sweeper models were conducted over a three-day period at a curbed test track under a tent that was erected on a parking lot:

- The standard Crosswind sweeper
- A prototype Crosswind NX high-performance filter regeneration sweeper with dust control

- The waterless Eagle FW designed with shrouded gutter brooms and vacuum assist that transports dust to the hopper (this model was tested both without and with water). The Eagle is a mechanical machine with main broom action and a conveyor used to entrap and transport sweepings to its hopper.
- A truck-mounted vacuum-based Whirlwind MV.

#### **Overall Pickup performance**

The overall pickup performance results from the five tests conducted are presented in Table 2.

Table 2 - Overall Pick-Up Performance Test Results

	INDIC 2 - C	WEIGHT THEY-	. pretioi	mance rest ves	uito	
		Remaining	Initial			
	!	Mass	Mass	Pick-up Mass	Pick-Up	Forward Sweeping
Sweeper Model	Type	(gms)	(gms)	(gins)	%	Speed (mph)
Crosswind (NX)	Regenerative	85.6	3405	3319.4	97.5	4.7
Crosswind	Regenerative	121.1	3405	3283.9	96.4	4.9
Waterless Eagle (FW)	Mechanical	288.3	3405	3116.7	91.5	4.9
Waterless Eagle (FW) with water	Mechanical	646.0	3405	2759.0	81.0	4.7
Whirlwind (MV)	Vacuum	221.1	3405	3183.9	93.5	5.1

#### Remaining Material by Particle Size (PS) Range

The remaining material in each particle size (PS) range that was measured through the use of sieve analyses is presented in Table 3.

Table 3 - Remaining Material by Particle Size Range (grams)

PS No.	Size Range (microns)	Crosswind NX	Crosswind Std.	Eagle FW	Eagle FW with water	Whirlwind MV
7	2000-6370	3.8	3.5	23.6	24.6	4.4
6	1000-2000	5.6	4.6	24.6	32.3	6.8
5	600-1000	5.2	4.7	16.7	28.4	8.9
4	250-600	13.6	15.9	43.5	104.7	43.1
3	125-250	23.4	44.3	91.4	287.3	106.1
2	63-125	7.2	17.0	24.5	75.6	32.7
1	<63	26.8	31.1	64.0	93.1	19.1

Fugitive dust losses will only affect the remaining material measured in the two smallest PS ranges (i.e., less than 125 microns). Qualitative analysis of the photographs taken during sweeping indicated that no visible fugitive dust losses occurred during the testing on the prototype Crosswind NX high-performance filter regeneration sweeper with dust control. The fugitive dust losses observed when the Eagle was

being tested (both with and without the use of the water spray) were very low. In the case of the test without water, this was due to the shrouded gutter broom design with the vacuum assist that transports fugitive dust generated by the gutter brooms directly to the hopper.



Some fugitive dust losses occurred in the process of transferring collected material from the stainless steel vacuum canister to the plastic container bags. However, it was largely believed that these losses were small in comparison to those from the sweeping process itself, and the losses through material transfer were essentially the same for each sample obtained.

#### Pickup performance results by PS range

The pickup efficiencies computed for each of the particle size ranges is presented in Table 4.

Table 4 - Pick-Up Performance Efficiencies by Particle Size Range (Percent of Initial Mass)

PS No.	Size Range (microns)	Crosswind NX	Crosswind Std.	Eagle FW	Eagle FW with water	Whirlwind MV
7	2000-6370	99.4	99.4	95.9	95.8	99.3
6	1000-2000	98.5	98.7	93.3	91.2	98.2
5	600-1000	97.8	98.1	93.1	88.3	96.3
4	250-600	97.9	97.6	93.4	84.2	93.5
3	125-250	97.7	95.7	91.1	72.0	89.6
2	63-125	97.0	93.0	89.9	68.7	86.5
1	<63	90.8	89.4	78.1	68.2	93.5

#### **DISCUSSION OF THE RESULTS**

#### Overall pickup performance

The pickup performance results were very good. The prototype Crosswind NX high-performance filter regeneration sweeper with dust control performed the best, with an impressive overall efficiency of 97.5 percent. The second-best performer was the standard regenerative air Crosswind at 96.4 percent overall. Regenerative air machines are generally considered the best overall performers in particulate

pickup. The Whirlwind MV vacuum machine had an overall pickup efficiency of 93.5 percent. The mechanical Waterless Eagle FW finished in fourth place overall with a still-impressive pick-up efficiency for a machine of its type measured at 91.5 percent. The Waterless Eagle FW operating with a water spray had an overall pickup efficiency measured at 81.0 percent. This result was also expected, since it has been known for some time by sweeper manufacturers that water spray used to suppress fugitive dust reduces a machine's ability to pick up particulate material. In fact, the pickup performance of the Waterless Eagle that used water spray was approximately 10.5 percent lower than the measured pickup of the Waterless Eagle without water.

#### Remaining material by particle size (PS) range

When we examined the remaining material by particle size (PS) range data, it became clear that the use of water to suppress fugitive dust resulted in a significant amount of additional material remaining on the street surface for particles less than 1000 microns. The use of water with the Eagle sweeper resulted in a 121 percent increase in the remaining mass for particles 250 to 1000 microns in size and a 153 percent increase in remaining material for particles less than 250 microns, when compared to using the same machine with no water spray for fugitive dust control.

#### Pickup performance by particle size range

In addition to the overall pickup performance discussed previously, there is a heightened amount of concern for pickup performance relative to the finest particles (i.e., less than 63 microns). As expected, all of the regenerative air and vacuum machines outperformed the mechanical one in this regard. It is interesting to note that the Whirlwind MV vacuum machine actually outperformed the prototype Crosswind NX model and the Crosswind in terms of finest particle pickup. However, the pickup percentages were very close, and this factor alone would not preclude the potential selection of a regenerative air machine (like the prototype model with dust control) over a vacuum one.

#### CONCLUSION

The results of this rigorous sweeper test clearly demonstrate the efficiency of Elgin Sweeper street sweepers – and specifically, the prototype Crosswind NX high-performance filter regeneration sweeper



with dust control, the regenerative air Crosswind, the vacuum Whirlwind MV and the mechanical Waterless Eagle FW - in removing storm-water pollutants.

Elgin Sweeper encourages other sweeper manufacturers to take this independent test and see what results their sweepers achieve. In the near future, perhaps this test will become a standard test in the industry to measure the efficiency of all sweepers on the market.

Elgin Sweeper is committed to providing municipalities with environmental solutions that reduce storm water and air pollution. From its alternative fuel-powered sweepers and waterless dust control sweepers, to its regenerative filtration systems, Elgin Sweeper is a technology leader in developing innovative products that result in cleaner streets, water and air.

## ABOUT ELGIN SWEEPER

Sold and serviced through a network of more than 100 dealer locations worldwide, Elgin products are the sweepers of choice for a variety of general street maintenance, special industrial and airport applications. With more than 90 years of experience, Elgin Sweeper offers municipalities, contractors and industries the most sweeper options in the country, using the latest sweeping technologies—mechanical, pure vacuum, regenerative air, alternative fuel and waterless dust control. Elgin Sweeper is a subsidiary of Federal Signal Corporation's Environmental Solutions Group.

Federal Signal Corporation (NYSE: FSS) is a leader in advancing security and wellbeing for communities and workplaces around the world. The company designs and manufactures a suite of products and integrated solutions for municipal, governmental, industrial and airport customers. Federal Signal's portfolio of trusted, high-priority products include Bronto aerial devices, Elgin and Ravo street sweepers, Federal Signal safety and security systems, Guzzler industrial vacuums, Jetstream waterblasters and Vactor sewer cleaners and vacuum excavators. Federal Signal was founded in 1901 and is based in Oak Brook, Illinois.

## ABOUT PACIFIC WATER RESOURCES, INC.

Located in Beaverton, Oregon, Pacific Water Resources, Inc., is an engineering consulting firm specializing in the fields of hydraulics, hydrology, water quality modeling and evaluation, fluvial



geomorphology, sediment transport, and computer-aided mapping. Recognized as a leader in watershed management planning and design, PWR's technical expertise has been at the forefront of every major regulatory and technical advancement for assessing, enhancing and protecting water resources since 1978.

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503/671-9709, ext. 24

#### FOR MORE INFORMATION

To learn more about Elgin Sweeper's role in reducing air and storm-water pollution or to find out how to make Elgin Sweeper's proven waterless sweeping technology part of your community's best management practices, please visit www.elginsweeper.com/airandwater. For additional information on Elgin Sweeper's line of sweepers or to schedule a demonstration, please visit www.elginsweeper.com or see your local Elgin Sweeper dealer.

For more information on Pacific Water Resources, Inc., or to learn more about the SIMPTM test procedure used for this test, please visit www.pacificwr.com.

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Elgin Sweeper 1300 W. Bartlett Rd. Elgin, IL 60120 U.S.A. www.elginsweeper.com





## Experts at Delivering Equipment Finance Solutions

June 9, 2017

Mr. Mike Moylan Maryland Industrial Trucks, Inc. 1330 W. Nursery Road Linthicum, MD 21090

TCF Equipment Finance, Inc ("Lessor") is pleased to present the following municipal lease quote for your review.

Lessee:

Town of Milton, DE

Equipment:

New Elgin Broom Badger from Maryland Industrial Truck

Estimated Equipment Cost:

\$190,570

Lease Structure:

Annual Payments in Advance (1st payment due on delivery)

Other Conditions:

Standard TCF terms and Conditions

Opt #1 5 annual pmts with 1 advance pmt of \$40,544.50. Rate of 3.19 % Opt #2 7 annual pmts with 1 advance pmt of \$29,921.28 Rate of 3.27 %

This quote is provided for discussion purposes only and is not a commitment or an offer to enter into the proposed transaction. The transaction is subject to credit approval by Lessor and additional credit enhancements may be required. If approved, Lessee must execute final documentation prepared by Lessor and satisfy all conditions set forth therein. This quote is for a net lease transaction. Manufacturer's warranties, if any, would be passed on to Lessee, and Lessor will provide no warranties.

This quote is based on Lessor's current cost of funds, which is subject to change. This quote expires, if not otherwise withdrawn, in 21 days.

Thank you again for this opportunity. If you have any questions, please do not hesitate to contact me

Sincerely,

## Joe Sikorski

Joseph Sikorski TCF Equipment Finance Ph: 610/966-8194 Email: jsikorski@tcfef.com







CENTRIFUGAL CLUTCH. The centrifugal clutch engagement prevents belt slip when engaging the clutch which means fewer maintenance costs.



25 HP (18.6 KW) EFI ENGINE. Performs well during cold-weather starts, has reduced occurrence of engine flooding and provides improved fuel economy over comparable carbureted gas engines.



**LARGE INFEED OPENING.** The 6"  $\times$  8" (15.2 cm  $\times$  20.3 cm) infeed opening makes feeding irregular material easier and decreases the amount of saw cuts needed prior to feeding the chipper:



SMARTFEED. This patented system helps increase operator productivity while reducing strain on vital engine parts. The feedsensing control system monitors engine rpm and automatically stops and reverses the feed roller when feeding larger, hardwood material.



ELECTRONICALLY SWITCHED BOTTOM
FEED STOP BAR. Strategically located to make
it possible for the operator's leg to strike the bar
and shut off the feed roller, either intentionally
or automatically in an emergency situation,
increasing operator safety while feeding material.



WIDE AXLE. Offers an ample footprint at the axle for side-to-side stability; additionally enhances transportability and visibility while backing up.







## **BC700XL** BRUSH CHIPPER

#### **GENERAL**

Length - feed table up, tongue in: 113" (287 cm)
Length - table down, tongue extended: 33" (338 cm)

Width: 71" (180.3 cm) Height: 102" (259.1 cm) Weight: 1800 lb (816.5 kg)

#### **ENGINE**

Make and model: Kohler ECH740

Number of cylinders: 2

Gross horsepower (maximum): 25 hp (18.6 kW)

Torque (max): 41.7 ft-lb (56.5 Nm) Fuel tank capacity: 6 gal (22.7 L)

Fuel type: Gasoline

Recommended oil: Kohler oil or API CH4/SJ

#### **FEED SYSTEM**

Feed roller dimension: 10" (25.4 cm)

Number of knives: 10 Feed speed: 49.4 m/min

Infeed table width: 41.2" (104.6 cm)
Infeed table length: 30.2" (76.7 cm)

Infeed throat capacity: 6" x 8" (15.2 cm x 20.3 cm)

#### SAFETY SYSTEM

Bottom feed stop bar: Standard

Reset method: Dual green hold-to-run buttons

Positions: Four position - E-Stop, Forward, Stop, Reverse

#### **CUTTING SYSTEM**

Material capacity: 6" (15.2 cm)

Width: 8" (20.3 cm)

Thickness: 1.25" (3.2 cm)
Diameter: 23.9" (60.7 cm)

Speed: 1748 rpm Number of knives: 2

Useable edges: 2

#### **DISCHARGE SYSTEM**

Chute height: 97.16" (246.8 cm) Chute rotation angle: 240 deg Rotation type: Manual

#### **ELECTRICAL SYSTEM**

System voltage: 12 Volt
Battery: Group 26, 400 CCA

Switches: Hold-to-run, sensitivity selector

#### CHASSIS

Hitch type: 2" (5.1 cm) ball coupler

Fender description: .1" (.3 cm) steel bolt-on Axle/suspension: 2000 lb (907.2 kg) torsion axle

Capacity: 2000 lb (907.2 kg)
Tires: ST185/80D13 load range D
Wheels: 13 x 5, bolt circle 5 on 4.5

Axle/suspension: 2000 lb (907.2 kg) torsion axle

Brake type: Electric optional Trailer light type: LED

#### **OPTIONS**

Special paint: Available, optional
Extended warranty: Available, optional

Preventative maintenance: Available, optional



#### **SALES QUOTATION**



Vermeer Mid Atlantic, Inc.

8830 Corridor Road

Annapolis Junction, MD 20701

Phone: 301-498-5200 Fax: (301) 498-8720

Web: www.VermeerMidAtlantic.com

Date: 5-31-17

Quote #: 053117ESH001

**Allen Atkins** 

Town of Milton 115 Federal St. Milton, DE 19968 Phone:

302-684-4345

Fax: Email:

Mobile:

Salesperson:

Chris Campbell

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(410) 829-6056

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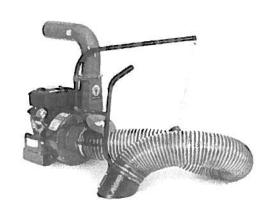
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Home / Billy Goat DL1801VE Truck Loader 570cc Vanguard 16" Impeller



## Billy Goat DL1801VE Truck Loader 570cc Vanguard 16" Impeller

\$3,800.99

\$104 / month

Qty:

1

ADD TO CART

SKU: 043-DL1801VE

DESCRIPTION SPECIFICATION

PRODUCT MANUFACTURER

Billy Goat

## WATER

### REVENUE

450-4600: Rents - Water - \$540,000

Currently, we are at 369,451.77 in Rents. I project an increase in FY18 of \$540,000.

**450-4610:** Water Tapping - \$12,500

Tapping fee for each anticipated new homes, \$500 x 25 homes. Currently budget amount is \$17,500, and \$14,000 has been received. It's anticipated that 5 less new home permits will be received before the fiscal year is complete. FY18 budgeted revenue amount has decreased from \$17,500 to \$12,500.

**450-4620**: Sale of Meters - \$25,437.65

This revenue line item is for the sale of meter pits and meters; 35 of each is anticipated at a cost of \$726.79 each. It is anticipated that 35 meter pits and meters will be purchased for new homes, irrigations, and repairs.

**450-4630**: Impact Fees - \$36,250

This revenue line item is for water impact fees expected for 25 new homes at \$1450 each home. This is an anticipated decrease, in the amount of \$14,500, from FY17.

450-4640: Reconnect/Disconnect Fees: - \$8,000

This revenue line is expected to change in FY18. We average around 20-30 water disconnects each quarter.

**450-4650**: Inspection Fees – \$3,500

This is expected income from inspection fees for pits and installing the meter. Each new home built will pay \$100 for inspections and also

residents who purchase meter pits for repairs and irrigations. FY18 anticipated budgeted amount is based on 35 new homes and irrigation pits installed.

450-4930: Misc Revenue- \$500

Revenue for scrap metals from meters, pipes, etc.

#### **EXPENSES**

**450-5180**: Training and Seminars - \$2,500

Current public works employees new training in the following areas; sample tester, backflow preventing, inspection, etc.

**450-5190**: Temp Labor - \$0

No requested funds for temporary labor.

**450-5220**: Water Engineering - \$20,000

Engineering services for future projects such as; repairs and maintenance to mains, towers, and wells.

**450-5240**: Legal Fees - \$3,000

Legal fees for review of bids, and other projects.

**450-5275**: Chlorine/Fluoride Supplies - \$12,000

This line is expected to remain the same as FY17.

**450-5280**: Supplies - \$17,000

This line funds cooler services, first aide safety supplies, office supplies, utility billing paper, curb boxes, stone, etc.

**450-5285**: Supplies: Pits/meters/lids - \$26,000

To purchase water meter pits, meters and lids. The parts will be used for new construction, irrigations, and repairs.

**450-5290**: Water tests - \$1,500

This expense is expected to increase from \$1,250 to \$1,500 in FY18. Testing for copper and lead, bacteriological, monthly water samples and any special samples.

**450-5300**: Advertisement Expense - \$1,000

This is needed for job postings, publishing of the CCR, bid advertisements and any projects that are needed for advertisement.

450-5350: License and Permit fees - \$400

Water operator license for Greg Wingo and John Koerkel.

**450-5360**: Equipment rental - \$0

This line item is expected to remain the same.

450-5380: Gas & Oil - \$8,000

This expense is expected to decrease from \$9,100 to \$8,000. The water department has a current fleet that uses gas and oil, of 3 pickup trucks, 1 large dump truck, 1 small dump truck, 1 work van, a Kubota, backhoe, bobcat and pumps.

450-5420: Misc. Operating - \$200

Expenses for background searches, CCR preparation and other expenses used for operating.

**450-5430**: Printing and Postage - \$5,500

Line is expected to decrease from \$6,000 to \$5,500.

450-5440: Propane - \$3,000

Line expense is expected to remain the same.

**450-5450**: Repairs and Maintenance – Water Tower - \$32,600

Agreement with Tank Management Company Corrosion Control to inspect all the water towers and repair and maintain as needed.

**450-5455**: Repair and Maintenance - Auto - \$7,000

This budget line is for Maintenance on Town trucks and Repairs.

**450-5460**: Repair and Maintenance – Building - \$3,000

FY18 budgeted amount will stay the same. The maintenance shop, pump houses and water treatment plant need shelving, more organization, roof repairs and painting.

**450-5465**: Repair and Maintenance – Hydrants - \$1,000

Budgeted amount to remain the same. This budget line helps equipped the Public Works with the parts needed to repair fire hydrants.

**450-5470**: Repair and Maintenance – Equipment - \$5,000

Budgeted amount to remain the same. This budget line helps to repair the Public Works Water Departments equipment such as pumps, excavation equipment, etc.

**450-5475**: Repair and Maintenance – Water Mains- \$20,000

FY18 budgeted amount, I am asking \$20,000 to cover the cost of valve replacing, water mains and for emergencies for main breaks.

**450-5476**: Repair and Maintenance – Wells - \$11,200

The budgeted amount for FY18 will stay the same. This budget line pays for repairs, service contract from A.C. Schultes and maintenance needed on the Towns four wells.

**450-5477**: Repair and Maintenance – Meters - \$12,000

This line item is for the purchase of pit setters, meter heads and lids.

**450-5480**: Telephone - \$4,000

The line is expected to remain the same. Currently, the budgeted amount is \$4,000 with \$2,471.00 expended. This line item is used to fund cell phones, land lines in the well house and miss utility tickets.

**450-5490**: Uniform Expense - \$4,500

FY18 budgeted amount will equip the Public Works Staff with the proper clothing all year long.

**450-5500**: Utilities - \$25,000

The utilities line is for electric for the well house, maintenance shop, etc. Currently, \$14,428.28 has been expended with June, July, August and September bills remaining.

450-5520: SRF Loan Expenses: \$48,615

Expense amount to remain the same for semi-annual loan payment.

450-5802: Cap Exp- Hydrants - \$0

No funds requested for Hydrants.

**450-5803**: Cap Exp - Mapping -?

**450-5807**: Cap Exp - Radio Read meter - \$0

No funds requested for radio reed meters.

450-5811: Cap Exp - Laptop Upgrade - \$0

No funds requested for a laptop upgrade.

450- New Line: Roof Corral

This handrail corral will be installed on Shipbuilders tower. Currently, we do not have a corral on top of tower #2 and this is a safety issue that needs to be corrected.

## **450-New Line**: Light Tower - \$8,000

Currently, the Town does not have a light tower. When we have an emergency at night we have to locate a tower or just go without. The Towns Public Works could use a Light Tower for emergency water main repairs, schedules main and valve replacements, road repair and for events held in the parks or streets.

## 450-New Line: 100KW Generator - \$42,000

Currently, when power is out in Town we cannot use well #5. When the sewer treatment was sold tidewater had disconnected the backup electric that serviced well #5 at that time. By purchasing a 100 KW we will be able to run the well and pumps in the treatment building and have a backup if needed for the main treatment building on Chandler St. This generator will be able to be moved to a new location to service the new well in the future.

## 450-New Line: Water Main Replacing -?

Atlantic Ave and Chestnut St. (Front St. / Coulter St.) are in need of main replacing. Along with replacing the mains you have several water services, street valves, curb valves reconstruction of the roadway and fire hydrants that will need to be included.



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## **Light Towers**

Overview

Industries & Applications Documentation & Tools



Overview







## Overview

#### PRODUCT FEATURES

- Start limit main breaker prevents start up under a load
- 14 gauge steel, tubular frame provides structural reliability in a variety of conditions
- Manually-deployed, 30' tall, 360° rotating steel mast projects 4000W of adjustable light to illuminate up to 5-7 acres
- Four-point outrigger stance withstands 65+ mph winds
- Automatic shutdown triggered by low oil or high temperature
- 30-gallon fuel tank with consumption rate of approximately 0.5 GPH for an estimated run time of 60 hours

### **Light Towers**

Rehable. Rugged. Ready. Godwin Light Towers are engineered to meet an array of illumination needs. Godwin Light Towers are powerful enough to cover 5 to 7 acres, yet portable enough to be manned by one person.

No matter where you are or what your application is, our imprecedented service is just a phone call away

### Specifications

- Engine: Mitsubishi L3E, 12.2 HP, four-stroke dieset, liquid-cooled (standard); Kubota D905, 11.9 HP, four-stroke dieset, liquid-cooled engine (optional)
- Generator: Marathon, four-pole, brushless, self-regulated 6000W
- Fuel Tank: 30 gallon
- Fuel Consumption: 0.5 gph
- Mast & Cord: 30' maximum extension, coiled
- Lights: Four 1000W metal halide
- Ballast Type: Coil & core
- Lumens: 440,000
- Coverage: 5-7 acres
- Travel Length: 166.71"
- Trailer Length: 107"
- Trailer Width: 48"
- Dry Weight: 1,600 pounds

## Industries & Applications

#### **Documentation & Tools**



Request more information

\* Required Field

First Name\*

Last Name\*

Company \*











# Godwin power generators

	G204W-S	G-P2GAW-	G-FISAWA	GHP45LW	CHEROLIV S	CHEASTWE	GHPRONW
Power Output	CHICAGO	III. STORESTONE	A STATE OF THE PARTY OF T	A CONTRACTOR OF THE PERSON	N SPINSTER WALLE	(Sandayalan)	The state of the s
Prime (kW)	18	27	34	46	59	67	80
Amps 400V Prote Rating	28	41	52	69	89	101	120
Amos 460V Standby failing	30	45	57	11	99	112	132
Single Phase Drime kW	15	26	33	45	56	62	/2
40V	63	168	138	188	233	258	300
Inbution							
Bakir	90	125	200	225	300	300	400
je Selection Engine	3 Position Padlockable Switch	3 Position Padio kable Swith	3 Position Padlockable Switch	3 Position Padiockable Switch	3 Position Padlockable Switch	3 Position Padiodable Switch	3 Position Fadlockable Switch
HP @ Prinse @1800 tomi	31.5	43	53	72	91	102	122
Fuel Tank Volume gal	56	66	106	113	147	147	147
Fuel Consumed Prime (galihi)	18	26	30	40	5 6	5.6	6.2
Approximate Run Tune hrs @ Prime	31.00	25 00	32 00	25 00	24 00	24 00	22 00
Size & Weight							
Skid Mounted LxWxH (in)	N/A	83X35X52	95X15X56	95x35x56	9/m38×62	96x38x6-2	96×38×62
Dry Wiright (Ibs)	N/A	2,074	2,537	2,415	3,438	3,563	3,549
Optional Trailer							
Trailer Mounted LxWxH (in)	105×68×56	150x57x67	143×57×77	143x5/x77	158×60×84	158 <b>±60x</b> 84	158x60x84
Dry Weight (lbs)	1,640	2,544	3,057	2,930	4,173	4,298	4,248

Concorders provide power for electric pumps, as well as for light towers so well consciudance day and right

On generative are stordy and have a descript optimized to work search-sely to jettic with our rate je of clock frich prings.



		30					
GPP100kW	R GF#115£W-F	GHP140kWA	CUP150LW-R	CAR'IBSLW	A GIETSWA	R GHP255NW	R GHP125EW
97	117	144	152	190	233	256	3/1
146	179	217	229	285	350	385	497
161	197	238	251	315	386	425	5.19
95	117	142	150		*	Si	
396	488	592	625				
450	600	700	700	800	1,200	1,200	1,600
	3 Position Padlockable Switch	Padiockable			Link / Reconnect Board	Link / Reconnect Board	tink / Reconnect Poard
150	180	216	278	286	353	422	489
342	342	342	342	360	480	480	616
77	9.8	10.9	11.0	15 2	16.9	17.9	21 1
40 00	32.00	29.00	28.00	21.00	26.00	24 00	27.00
132×50×73	132x50x77	132x <b>50x7</b> 7	132 <b>x50x77</b>	132x50x77	156x60×90	156x60x90	175x60x96
6,206	6,409	6,765	6,765	7,330	8,860	8,860	1,275
10×86×90	210x86x93	210x86x93	210x86x93	210x86+93	231x102x110	231×102±126	250×102×116
7,602	7,805	8,705	8,705	9,270	10,860	11,763	16.000

Centeration listed are available formatid. For additional safemble last investigations.

